



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/648,540

08/26/2003

Jiawen Dong

134717-1

4671

23413 7590 10/15/2008
CANTOR COLBURN, LLP
20 Church Street
22nd Floor
Hartford, CT 06103

EXAMINER

HUSON, MONICA ANNE

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

10/15/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/648,540
Filing Date: August 26, 2003
Appellant(s): DONG ET AL.

Grant Ehrlich
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11 August 2008 appealing from the Office action mailed 11 February 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5145877	Bopp et al.	09-1992
5525645	Ohkawa et al.	06-1996
6306953	Fortuyn et al.	10-2001
4727093	Allen et al.	02-1988
5872201	Cheung et al.	02-1999
6407200	Singh et al.	06-2002

-US Patent Application Publication 2002/0048691 to Davis et al. (04-2002)

-US Patent Application Publication 2002/0137840 to Adedeji et al. (09-2002)

-JP 10-306268 to Toshihiko et al. (11-1998)

-Rosato, Domick V., Donald Rosato, Marlene Rosato. INJECTION MOLDING HANDBOOK (3rd ed.). Boston: Kluwer Academic Publishers. 2000. Pages 60, 77, 78, 179, 180, 260, 261, 283.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-6, and 15-17 are rejected under 35 USC 103(a) as being unpatentable over Davis et al. (U.S. Patent Application Publication 2002/0048691), in view of Rosato's Injection Molding Handbook (3rd ed), in view of Toshihiko et al. (JP 10-306268), further in view of Bopp et al. (U.S. Patent 5,145,877). Regarding Claim 1, Davis shows that it is known to carry out a method of molding an article, comprising injection molding a polymeric mixture of polystyrene and polyphenylene ether (Para. 0094; polystyrene=polyalkenyl aromatic; polyphenylene ether=polyarylene ether), wherein an injection molded radial disk exhibits a radial tilt change of less than or equal to 0.35 (Para. 0031, 0057, 0058), wherein the disk exhibits a percent feature replication of greater than or equal to about 90% (Para. 0120). Davis does not show a particular clamp tonnage useful during his injection molding process. Rosato shows that it is known to carry out a molding process using a clamp tonnage of about 12 to about 35 tons to form the article (Page 77-78, Kurto/John Manufacturer). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 1791

to choose a clamp tonnage such as Rosato discloses during Davis' molding process as part of routine experimentation in order to fine tune a molding process. See MPEP 2144.05 (II)(B). Davis does not show specific conditions under which radial tilt is measured. Toshihiko et al., hereafter "Toshihiko," show that it is known to carry out a method wherein radial tilt is measured after 96 hours at 80C (Para. 0008). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt measuring parameters during Davis' molding method in order to insure that the radial tilt measurements are consistent with those required by customer specifications. Davis does not discuss temperature requirements for his molding process. Bopp et al., hereafter "Bopp," show that it is known to carry out a method wherein injection molding of polyphenylene oxide (i.e. polyarylene ether) and polystyrene (i.e. polyalkenyl aromatic) is carried out, wherein the material melt temperature is 328C and the mold temperature is 135C (Column 8, lines 23-44). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Bopp's suggested temperatures during the molding process of Davis in order to carry out the molding process according to temperatures which are appropriate for the particular molding materials.

Regarding Claim 3, Davis shows the process as claimed as discussed above in the rejection of claim 1 above, including a method wherein an injection molded radial disk exhibits a radial tilt change of less than or equal to 0.3 (Para. 0031, 0057, 0058). Davis does not show specific conditions under which radial tilt is measured. Toshihiko show that it is known to carry out a method wherein radial tilt is measured after 96 hours at 80C (Para. 0008). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt measuring parameters during Davis' molding method in order to insure that the radial tilt measurements are consistent with those required by customer specifications.

Regarding Claim 4, Davis shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the melt temperature is 328C, i.e. about 340 (Column 8, lines 32-33), meeting Appellant's claim.

Regarding Claim 5, Davis shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the mold temperature is 135C, i.e. about 120°C (Column 8, lines 40-44), meeting Appellant's claim.

Regarding Claim 6, Davis shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a particular claim tonnage. Rosato shows a method wherein the clamp tonnage is of about 15 to about 30 tons (Page 77-78). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Rosato's clamp tonnage during Davis' molding method as part of routine experimentation in order to fine tune a molding process. See MPEP 2144.05 (II)(B).

Regarding Claim 8, Davis shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the disk exhibits a percent feature replication of greater than or equal to 95 percent (Para. 0120), meeting Appellant's claim.

Regarding Claim 15, Davis shows the process as claimed as discussed above in the rejection of claim 1 above, including a method of making a data storage disk (Para. 0002), meeting Appellant's claim.

Regarding Claim 16, Davis shows the process as claimed as discussed above in the rejection of claim 1 above, including a method of making a laminated data storage assembly (Para. 0002), meeting Appellant's claim.

Regarding Claim 17, Davis shows that it is known to carry out a method of molding an article, comprising injection molding a polymeric mixture of polystyrene and polyphenylene ether (Para. 0094; polystyrene=polyalkenyl aromatic; polyphenylene ether=polyarylene ether), wherein an injection molded radial disk exhibits a radial tilt change of less than or equal to 0.35 (Para. 0031, 0057, 0058), wherein the disk exhibits a percent feature replication of greater than or equal to about 90% (Para. 0120). Davis does not show a particular clamp tonnage useful during his injection molding process. Rosato shows that it is known to carry out a molding process using a clamp tonnage of about 12 to about 35 tons to form the article (Page 77-78, Kurto/John Manufacturer). It would have been prima facie obvious to one of ordinary skill in the art at the time the

Art Unit: 1791

invention was made to choose a clamp tonnage such as Rosato discloses during Davis' molding process as part of routine experimentation in order to fine tune a molding process. See MPEP 2144.05 (II)(B). Davis does not show specific conditions under which radial tilt is measured. Toshihiko et al., hereafter "Toshihiko," show that it is known to carry out a method wherein radial tilt is measured after 96 hours at 80C (Para. 0008). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt measuring parameters during Davis' molding method in order to insure that the radial tilt measurements are consistent with those required by customer specifications. Davis does not discuss temperature requirements for his molding process or a specific polyphenylene oxide. Bopp et al., hereafter "Bopp," show that it is known to carry out a method wherein injection molding of poly(2,6-dimethyl-1,4-phenylene oxide (Column 3, lines 46-49) and polystyrene is carried out, wherein the material melt temperature is 328C and the mold temperature is 135C (Column 8, lines 23-44). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Bopp's suggested temperatures during the molding process of Davis in order to carry out the molding process according to temperatures which are appropriate for the particular molding materials.

Claims 18-20, 23-24, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Toshihiko, and Bopp, further in view of Ohkawa et al. (U.S. Patent 5,525,645).

Regarding Claim 18, Davis shows that it is known to carry out a method of molding an article comprising injection molding a polymeric material to form articles according to a molding model comprising molding parameters and molding parameter values (Para. 0094, 0113), including injection molding a polymeric mixture of polystyrene and polyphenylene ether (Para. 0094; polystyrene=polyalkenyl aromatic; polyphenylene ether=polyarylene ether), wherein an injection molded radial disk exhibits a radial tilt change of less than or equal to 0.35 (Para. 0031, 0057, 0058), and wherein the disk exhibits a percent feature replication of greater than or equal to about 90%

Art Unit: 1791

(Para. 0120). Davis does not give specific testing processes. Toshihiko shows that it is known to carry out a method including testing disk assemblies fabricated from the disks for radial tilt change, creating an updated molding model based on the molding parameter values that resulted in disk assemblies fabricated from the disks having a radial tilt change within a selected range of values; and repeating the molding, testing, and creating steps to form final disks and a final molding model (Para 0008; It is noted that Toshihiko's "repeated research" would comprise the claimed steps.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt change testing during Davis' molding process in order to accurately form an article that must meet strict end-use specifications. Davis does not show testing the articles for percent feature replication. Ohkawa et al., hereafter "Ohkawa," show that it is known to carry out a method comprising testing the disks for percent feature replication; creating an updated molding model based on the mold parameter values that resulted in disks exhibiting a percent feature replication within a selected range of values; and repeating the molding, testing, and creating steps until the final disks exhibit a percent feature replication of greater than or equal to about 90 percent (Column 12, lines 66-67; Column 13, lines 1-11, 45-67; Column 14, lines 1-2). Ohkawa and Davis are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Ohkawa's testing procedures with Davis' molding process in order to insure the quality of the molded articles.

Regarding Claim 19, Davis shows the process as claimed as discussed above in the rejection of claim 18 above, but he does not show specific conditions under which radial tilt is measured. Toshihiko show that it is known to carry out a method wherein radial tilt is measured after 96 hours at 80C (Para. 0008). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt measuring parameters during Davis' molding method in order to insure that the radial tilt measurements are consistent with those required by customer specifications.

Art Unit: 1791

Regarding Claim 20, Davis shows the process as claimed as discussed above in the rejection of claim 18 above, including a method wherein an injection molded radial disk exhibits a radial tilt change of less than or equal to 0.35 (Para. 0031, 0057, 0058). Davis does not show specific conditions under which radial tilt is measured. Toshihiko show that it is known to carry out a method wherein radial tilt is measured after 96 hours at 80C (Para. 0008). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt measuring parameters during Davis' molding method in order to insure that the radial tilt measurements are consistent with those required by customer specifications.

Regarding Claim 21, Davis shows the process as claimed as discussed above in the rejection of claim 18 above, including a method wherein an injection molded radial disk exhibits a radial tilt change of less than or equal to 0.35 (Para. 0031, 0057, 0058). Davis does not show specific conditions under which radial tilt is measured. Toshihiko show that it is known to carry out a method wherein radial tilt is measured after 96 hours at 80C (Para. 0008). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt measuring parameters during Davis' molding method in order to insure that the radial tilt measurements are consistent with those required by customer specifications.

Regarding Claim 23, Davis shows the process as claimed as discussed in the rejection of Claim 18 above, including a method wherein the final disks exhibit a percent feature replication of greater than or equal to 95% (Para. 0120), meeting Appellant's claim.

Regarding Claim 24, Davis shows the process as claimed as discussed in the rejection of Claim 18 above, including a method wherein the molding parameters are mold temperature (Para. 0113), meeting Appellant's claim.

Regarding Claim 31, Davis shows the process as claimed as discussed above in the rejection of claim 18 above, including a method of making a data storage disk (Para. 0002), meeting Appellant's claim.

Regarding Claim 32, Davis shows the process as claimed as discussed above in the rejection of claim 18 above, including a method of making a laminated data storage assembly (Para. 0002), meeting Appellant's claim.

Claims 10 and 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, and Toshihiko, in view of Adedjei et al. (US PGPub 2002/0137840).

Regarding Claim 10, Davis shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a specific polymeric structure. Adedjei shows that it is known to carry out a method wherein the polyarylene ether comprises the claimed structure (see claim listing) (Paragraphs 0015-0016). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Adedjei's specific polymeric structure in Davis' molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Regarding Claim 14, Davis shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a specific molding composition. Adedjei shows that it is known to carry out a method wherein the polyarylene ether is present in the polymeric material in an amount of about 40 percent by weight and the polyalkenyl aromatic is present in the polymeric material in amount of about 60 percent by weight based on the total weight of the polyarylene ether and the polyalkenyl aromatic (Para 0014). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Adedjei's specific polymer in Davis' molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, further in view of Fortuyn et al. (U.S. Patent 6,306,953). Davis shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a polymer with a specific viscosity. Fortuyn et al., hereafter

Art Unit: 1791

“Fortuyn,” show that it is known to carry out a method wherein the polyarylene ether has an intrinsic viscosity of about 0.10 to about 0.60 deciliters per gram as measured in chloroform at 25°C (Column 2, lines 41-43). Fortuyn and Davis are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use a material with Fortuyn’s viscosity in Davis’ molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, further in view of Allen (U.S. Patent 4,727,093). Davis shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a specific polyalkenyl aromatic. Allen shows that it is known to carry out a process wherein the polyalkenyl aromatic contains at least 25% by weight of the claimed structural units (see claim listing) (Column 4, lines 3-23). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Allen’s specific polymeric structure in Davis’ molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, further in view of Cheung et al. (U.S. Patent 5,872,201). Davis shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a specific polyalkenyl aromatic. Cheung et al., hereafter “Cheung,” show that it is known to carry out a method wherein the polyalkenyl aromatic is atactic crystal polystyrene (Column 7, lines 37-38). Cheung and Davis are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Cheung’s specific polymer in Davis’

Art Unit: 1791

molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, and Ohkawa, further in view of Singh. Davis shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show using a specific polymeric structure. Singh shows that it is known to carry out a method wherein the polyarylene ether comprises the claimed structure (see claim listing) (Column 3, lines 5-27). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Singh's specific polymeric structure in Davis' molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, and Ohkawa, further in view of Fortuyn. Davis shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show using a polymer with a specific viscosity. Fortuyn shows that it is known to carry out a method wherein the polyarylene ether has an intrinsic viscosity of about 0.10 to about 0.60 deciliters per gram as measured in chloroform at 25°C (Column 2, lines 41-43). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use a material with Fortuyn's viscosity in Davis' molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, and Ohkawa, further in view of Allen. Davis shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show a specific polyalkenyl aromatic. Allen shows that it is known to carry out a process wherein the polyalkenyl aromatic contains at least 25% by weight of the claimed structural units (see claim listing) (Column 4, lines 3-23). It would have been

Art Unit: 1791

prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Allen's specific polymeric structure in Davis' molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Rosato, Bopp, Toshihiko, and Ohkawa, further in view of Adedeji. Davis shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show a specific molding composition. Adedeji shows that it is known to carry out a method wherein the polyarylene ether is present in the polymeric material in an amount of about 40 percent by weight and the polyalkenyl aromatic is present in the polymeric material in amount of about 60 percent by weight based on the total weight of the polyarylene ether and the polyalkenyl aromatic (Para 0014). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Adedeji's specific polymer in Davis' molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

(10) Response to Argument

(A)

Appellant contends that Bopp and Davis do not suggest the instant invention because one of ordinary skill in the art would not have been prompted to consider the teachings of Bopp (e.g. melt temperatures) to be applicable to injection molding. This is not persuasive because Bopp clearly identifies that his materials can be used in the exemplary embodiment of extrusion, but also in other equally-known molding processes including injection molding (Column 5, lines 26-31, 57-62). It is interpreted that this disclosure is sufficient to show that Bopp's teachings are applicable to injection molding.

Furthermore, Appellant notes that Bopp shows that injection molding can happen subsequent to melt compounding, so therefore, melt compounding is distinct from injection molding. This is not persuasive because the examiner has not previously equated melt compounding to injection molding. The examiner notes that, functionally,

Art Unit: 1791

the melt compounder prepares the molding material to its melted state prior to the material entering a die or shaping apparatus, such as an injection mold (Column 5, lines 57-62; Column 8, lines 27-33). Therefore, the temperature of the melted material as it exits the melt compounder at the die or shaping apparatus (e.g. an injection mold) is called the melt temperature of the material being shaped. It is maintained that Bopp shows the claimed melt temperature (Column 8, lines 32-33). Although Bopp discloses the claimed temperature of a shaping apparatus that is different from that which is claimed (Column 8, lines 39-44), it is maintained that since Bopp gives equivalent shaping apparatuses (Column 5, lines 57-62), this shaping apparatus temperature would be applicable to all equivalent shaping apparatuses, such as an injection mold, therefore meeting the claimed limitations.

Appellant contends that Davis does not show the claimed melt temperature or mold temperature. This is not persuasive because Davis was not cited to show these features. These features are fairly suggested by Bopp, as discussed above.

Appellant contends that there is no reason to combine Davis and Bopp. This is not persuasive because Bopp and Davis clearly describe similar molding materials (See Bopp, Column 8, lines 22-25 (polyphenylene oxide~polyarylene ether and polystyrene~polyalkenyl aromatic)), (See Davis, Para. 0094 (polyphenylene ether~polyarylene ether, polystyrene~polyalkenyl aromatic)). Bopp and Davis clearly describe injection molding processes applicable to these similar materials (See Bopp, Column 5, lines 57-62), (See Davis, Para. 0057). Davis does not give particular melt or shaping temperatures. Bopp gives applicable melt temperatures and shaping apparatus (e.g. injection molding) temperatures. It is maintained that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Bopp's temperature teachings during Davis' molding process because the similar molding materials would need to be processed (i.e. melted and shaped) at the appropriate temperatures, as noted by Bopp.

Appellant contends that the Examiner has used Appellant's disclosure to selectively combine Davis, Rosato, Bopp, and Toshihiko. Specifically, while Davis discloses injection molding, it does not provide adequate direction, without hindsight, to

Art Unit: 1791

pick and choose requisite selected elements from among the myriad of possibilities disclosed by Bopp. This is not persuasive because it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). See previous paragraph for analysis of the obviousness of and motivation for the combination of Davis and Bopp.

Further, Appellant contends that Davis does not provide adequate direction, without hindsight, to pick and choose the requisite selected elements from the cited portions of Rosato, regarding claim tonnage. This is not persuasive because it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). It is noted that MPEP 2144.05 gives direction on the obviousness of ranges: "In the case where the claimed ranges 'overlap or lie inside of ranges disclosed by the prior art' a prima facie case of obviousness exists". Also, as noted in the Final Office Action, by showing that a wide range of clamp tonnages can be used depending on the application, Rosato clearly establishes that clamp tonnage is an obvious variable process parameter that can be changed depending on the resin or desired product characteristics. Therefore, it is maintained that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to choose the claimed clamp tonnage from the ranges disclosed by Rosato during Davis' molding process in order to apply the appropriate pressure during the cycle.

Appellant contends that the unexpected results in Tables 1 and 2 of the instant specification support the nonobviousness of the claimed method. Initially, it is noted that it is unclear which features of the claimed method are being argued as nonobvious

Art Unit: 1791

by this statement. Tables 1 and 2 show a variety of molding conditions, however, it is noted that no molding conditions are listed for the comparative examples. Also, the molding conditions that are listed for Runs 1-17 (Table 1) and Runs 18-32 (Table 2) are not varied in a systematic way, so as to conclusively show any unexpected results that diverge from a clear trend. Therefore, there is no data that would allow one to decisively conclude that the radial tilt values are exclusively dependent on one certain “unobvious” molding condition.

Appellant contends that Rosato teaches away from the claimed molding temperatures. This is not persuasive because Rosato is not cited in the Final Office Action to show the claimed molding temperatures.

Appellant contends that the Examiner has not provided an English language translation of the Toshihiko reference. This is not persuasive, as a English language Machine Translation was provided to Appellant in the Non-Final Office Action mailed 7 March 2006, as it was noted on the PTO-892 attached thereto and indexed as a 7-page Non-Patent Literature document on the same date.

(B)

Appellant contends that Claim 18 and its dependents are not properly rejected for the same reasons as Claims 1 and 17. These reasons are not persuasive as discussed above in Section (A).

(C)

Appellant contends that Claims 10 and 14 are not properly rejected for the same reasons as Claim 1. These reasons are not persuasive as discussed above in Section (A).

(D)

Appellant contends that Claim 11 is not properly rejected for the same reasons as Claim 1. These reasons are not persuasive as discussed above in Section (A).

Art Unit: 1791

(E)

Appellant contends that Claim 12 is not properly rejected for the same reasons as Claim 1. These reasons are not persuasive as discussed above in Section (A).

(F)

Appellant contends that Claim 13 is not properly rejected for the same reasons as Claim 1. These reasons are not persuasive as discussed above in Section (A).

(G)

Appellant contends that Claim 27 is not properly rejected for the same reasons as Claim 18. These reasons are not persuasive as discussed above in Section (B).

(H)

Appellant contends that Claim 28 is not properly rejected for the same reasons as Claim 18. These reasons are not persuasive as discussed above in Section (B).

(I)

Appellant contends that Claim 29 is not properly rejected for the same reasons as Claim 18. These reasons are not persuasive as discussed above in Section (B).

(J)

Appellant contends that Claim 30 is not properly rejected for the same reasons as Claim 18. These reasons are not persuasive as discussed above in Section (B).

Art Unit: 1791

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Monica A Huson/

Primary Examiner, Art Unit 1791

Conferees:

/Jennifer Michener/

QAS, TC1700

/Christina Johnson/

Supervisory Patent Examiner, Art Unit 1791